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EXAMINER

VU, PHY ANH TRAN

ART UNIT	PAPER NUMBER
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2437

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/567,689	Applicant(s) KIKKOJI ET AL.	
	Examiner PHY ANH VU	Art Unit 2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, and 15-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED OFFICE ACTION

This office action is in response to an amendment filed 12/23/2009.

Response to Arguments

Applicant's arguments filed 07/24/2009 have been considered but are moot in view of the new ground(s) of rejection.

On pages 10-11, Applicant argues that Kuriya does not disclose the feature of "deleting means for deleting the apparatus ID data after deleting the service ID data."

In response, Examiner respectfully disagrees. As shown in Fig. 17, the apparatus ID as disclosed by Kuriya is deleted after the step of updating the usage conditions, during which the "check-out count" is updated with new value. As described in the Office Action, a value of this "check-out count" corresponds to the service ID since a given value of the "check-out count" can determine the service associated with the corresponding content a user can have (the user may be denied service if the permitted check-out count is zero). Also, as disclosed in Kuriya, the "permitted check-out count" information (with a corresponding "count" or value), e.g. shown at least in Figs. 11-12, can specify the check-in and/or check-out services and how the services should be performed. Further, the old value is updated with new value, at least it is clearly deleted. Therefore, Kuriya clearly discloses the feature of "deleting means for deleting the apparatus ID data after deleting the service ID data."

Also on pages 10-11, Applicant argues that Kuriya does not disclose the feature of “deleting means for producing a result of an authentication based on the user ID data and the apparatus ID data.”

In response, Examiner respectfully disagrees. At least in [0280]-[0284], Kuriya discloses an authentication process which involves both the user and the apparatus ID. It is clear that, in the context, the user must be identified via the user ID. Therefore, the result of such an authentication process must be produced based on both the user ID and the apparatus ID.

On pages 11-12, Applicant argues that Halen does not disclose the feature of “transmitting means for transmitting a ticket to the external apparatus based on the result of the authentication.”

In response, Examiner respectfully disagrees. As described in the Office Action, Halen discloses this feature at least on page 8, lines 15-25 and page 9, lines 11-21. The ticket is the authenticated result with a time stamp that is used for detecting replay attacks.

Applicant’s arguments on pages 12-13 with respect to claim 3 are found not persuasive for the same reason as discussed above.

On page 13, Applicant argues that Kuriya does not disclose the feature of “the transmitting means transmits a request corresponding to the service ID data to a different external apparatus after the service ID data is deleted and before the apparatus ID data is deleted” since Kuriya does not disclose deleting the service ID.

In response, Examiner respectfully disagrees. The apparatus ID as disclosed by Kuriya is deleted after the step of updating the usage conditions, during which the “check-out count” is updated with new value. As described in the Office Action, a value of this “check-out count” corresponds to the service ID since a given value of the “check-out count” can determine the service associated with the corresponding content a user can have (the user may be denied service if the permitted check-out count is zero). Also, as disclosed in Kuriya, the “permitted check-out count” information (with a corresponding “count” or value), e.g. shown at least in Figs. 11-12, can specify the check-in and/or check-out services and how the services should be performed. Further, the old value is updated with new value, at least it is clearly deleted. Therefore, Kuriya clearly discloses the feature of “deleting means for deleting the apparatus ID data after deleting the service ID data.

Natsuno discloses after the first step of the deleting process and before the last step of the deleting process, the transmitting means transmits a request corresponding to the service ID data to a different external apparatus as shown at least in Figs. 29 & 30. When combined with Kuriya, one skilled in the art would arrive at having the transmitting means transmit the request after the service ID is deleted (as the first step) and before the apparatus ID data is deleted (as the last step).

Therefore, Kuriya and Natsuno disclose the limitation of “the transmitting means transmits a request corresponding to the service ID data to a different external apparatus after the service ID data is deleted and before the apparatus ID data is deleted”.

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As such, Applicant's arguments are found not persuasive.

Examiner Notes

Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 3 recites, "another external apparatus having, data-transmitting means for transmitting the user ID data, the apparatus ID data and the service ID data to the information-processing apparatus, ID data storage means for storing the apparatus ID data, ID data deleting means for deleting the apparatus ID data stored in the ID data

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storage means, deletion-request transmitting means for transmitting the request data requesting for the deletion, and completion-information receiving means for receiving the deletion-complete information,” which contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5-8, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuriya et al (US 2001/0056404 A1, hereinafter Kuriya) and Natsuno et al (US 2002/0194474 A1, hereinafter Natsuno), further in view of Halen et al. (WO 03/028283 – hereinafter Halen).

Regarding claim 1, Kuriya discloses an information-processing apparatus configured to delete information stored in accordance with a request made by a user for canceling a service (*Fig. 17, elements S4106, S4206; Fig. 33, elements S11206, 11502, wherein content, mobile telephone ID, and ID of portable medium are deleted*), comprising:

receiving means for receiving service ID data designating a specific service to be provided together with user ID data (*Paragraphs [0034][0237], reception control means ; wherein user ID and the “permitted check-out count” information, which corresponds to service ID are received*), from an external apparatus (*Paragraph [0036], wherein, mobile telephone, personal computer, or a PDA corresponds to external apparatus*), and for receiving the user ID data and apparatus ID data from the external apparatus ([0237]);

storage means for storing the user ID data and the service ID data (*Paragraphs [0034] [0044] [0069] [0420], storage control means*), in association with the apparatus ID data which identifies the external apparatus and which has been registered (*Paragraphs [0237] [0259], device ID denotes the ID of mobile phone, personal computer or PDA, which corresponds to apparatus ID*), wherein when user sends a request to purchase a content to the manager server, the request includes user ID, device ID, and content ID, which implies the device has been registered);

deleting means for deleting the apparatus ID data after deleting the service ID (*Fig. 17, elements S4106 & S4206; Paragraphs [0267][0320][0324] – wherein updating the permitted check-out count results in the old value of the check-out count being deleted*), when the receiving means receives request data requesting for a deletion of the apparatus ID data, the request data including the user ID data and the apparatus ID data (*Paragraphs [0319-0320, 0324]*), and for producing a result of an authentication based on the user ID data and the apparatus ID data ([0016][0213][0280]-[0284]).

Kuriya does not disclose transmitting means for transmitting a ticket to the external apparatus based on the result of the authentication, and for transmitting, to the external apparatus, deletion-complete information indicating that the deleting means has finished deleting, the ticket including time data representing a time of the authentication.

Natsuno discloses transmitting means for transmitting, to an external apparatus, deletion-complete information indicating that the deleting means has finished deleting (*Paragraphs [0034] [0038] [0115] [0130] [0139-0140], wherein a deletion completion notice is shown on the display of the mobile terminal*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Kuriya into the system of Natsuno because it would provide for the purpose of saving memory area by deleting unnecessary information (*Paragraph [0123]. It is also an indication that the deleting transaction is officially over, so that the resource can be recycled for other processes and updating purposes.*)

Kuriya and Natsuno do not disclose transmitting a ticket to the external apparatus based on the result of the authentication, the ticket including time data representing a time of the authentication.

However, Halen discloses the transmitting means transmits a ticket to the external apparatus based on the result of the authentication (*p. 9, lines 11-21*), the ticket including time data representing a time of the authentication (*p. 8, lines 15-25*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Halen into the information-processing apparatus disclosed by Kuriya and Natsuno in order to detect replay attacks, i.e. attempt to use an old authenticated result several times, which may be harmful to the system (*Halen*, p. 8, lines 23-25).

Regarding claim 2, Kuriya discloses the information-processing apparatus according to claim 1, wherein the external apparatus identified by the apparatus ID data stored in the storage means in association with the service ID data (*Paragraphs [0259] [0262] [0267]*), is requested to provide the service (*Paragraph[0034] [0237]*).

Regarding claim 5, Kuriya discloses a communication method for use in an information-processing apparatus configured to delete information stored, in accordance with a request made by a user for canceling a service (*Fig. 17, elements S4106, S4206; Fig. 33, elements S11206, 11502, wherein content, mobile telephone ID, and ID of portable medium are deleted*) , comprising:

receiving, from an external apparatus, service ID data designating a specific service to be provided, together with user ID data and apparatus ID data identifying the external apparatus (*Paragraphs [0034][0038][0237]*, *reception control means ; wherein user ID and "permitted check-out count" information which corresponds to service ID are received; mobile telephone, personal computer, or a PDA corresponds to external apparatus*);

storing the user ID data, the apparatus ID data and the service ID data, in association with one another data (*Paragraphs [0044][0259] [0420], storage control means; device ID denotes the ID of mobile phone, personal computer or PDA, which corresponds to apparatus ID*);

authenticating the user ID data and the apparatus ID data to produce an authentication result ([0281])

deleting, with a processor, the apparatus ID data after deleting service ID data, when request data requesting for a deletion of the apparatus ID data is received, the request data including with the user ID data and the apparatus ID data (*Fig. 17, elements S4106 & S4206; Paragraphs [0319][0320][0324]*).

Kuriya does not disclose transmitting a ticket to the external apparatus, based on the authentication result, the ticket including data representing a time of the authenticating; transmitting, to the external apparatus, deletion-complete information indicating that the deleting means has finished deleting.

However, Natsuno discloses transmitting, to the external apparatus, deletion-complete information indicating that the deleting means has finished deleting (*Paragraphs [0139-0140], wherein a deletion completion notice is shown on the display of the mobile terminal*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Natsuno into the system of Kuriya because it would provide for the purpose of saving memory area by deleting

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unnecessary information (*Paragraph [0123]. It is also an indication that the deleting transaction is officially over, so that the resource can be recycled for other processes and updating purposes.*)

Kuriya and Natsuno do not disclose transmitting a ticket to the external apparatus based on the result of the authentication, the ticket including time data representing a time of the authentication.

However, Halen discloses the transmitting means transmits a ticket to the external apparatus based on the result of the authentication (*p. 9, lines 11-21*), the ticket including time data representing a time of the authentication (*p. 8, lines 15-25*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Halen into the information-processing apparatus disclosed by Kuriya and Natsuno in order to detect replay attacks, i.e. attempt to use an old authenticated result several times, which may be harmful to the system (*Halen, p. 8, lines 23-25*).

Regarding claim 6, Kuriya discloses a computer-readable medium including a communication program for use in an information-processing apparatus configured to delete information stored, in accordance with a request made by a user for canceling a service (*Fig. 17, elements S4106, S4206; Fig. 33, elements S11206, 11502, wherein content, mobile telephone ID, and ID of portable medium are deleted*), wherein the communication program when executed by a computer causes the computer to perform a method comprising:

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receiving, from an external apparatus, service ID data designating specific service to be provided, together with user ID data and apparatus ID data identifying the external apparatus (*Paragraphs [0034][0038][0237]*, *reception control means* ; wherein user ID “permitted check-out count” information which corresponds to service ID are received; mobile telephone, personal computer, or a PDA corresponds to external apparatus);

storing the user ID data, the apparatus ID data and the service ID data, in association with one another (*Paragraphs [0044][0259] [0420]*, *storage control means*; device ID denotes the ID of mobile phone, personal computer or PDA, which corresponds to apparatus ID);

authenticating the user ID data and the apparatus ID data to produce an authentication result (*[0281]*):

deleting the apparatus ID data after deleting the service ID data, when request data requesting for a deletion of the apparatus ID data is received, the request data including the user ID data and the apparatus ID data(*Fig. 17, elements S4106 & S4206; Paragraphs [0319][0320][0324]*) .

Kuriya does not disclose transmitting, to the external apparatus, deletion-complete information indicating that the deleting means has finished deleting.

However, Natsuno discloses transmitting, to an external apparatus, deletion-complete information indicating that the deleting means has finished deleting

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(Paragraphs [0034][0039]-[0040] [0139-0140], wherein a deletion completion notice is shown on the display of the mobile terminal).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Kuriya into the system of Natsuno because it would provide for the purpose of saving memory area by deleting unnecessary information *(Paragraph [0123]. It is also an indication that the deleting transaction is officially over, so that the resource can be recycled for other processes and updating purposes.)*

Kuriya and Natsuno do not disclose transmitting a ticket to the external apparatus based on the result of the authentication, the ticket including time data representing a time of the authentication.

However, Halen discloses the transmitting means transmits a ticket to the external apparatus based on the result of the authentication *(p. 9, lines 11-21)*, the ticket including time data representing a time of the authentication *(p. 8, lines 15-25)*.

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Halen into the information-processing apparatus disclosed by Kuriya and Natsuno in order to detect replay attacks, i.e. attempt to use an old authenticated result several times, which may be harmful to the system *(Halen, p. 8, lines 23-25)*.

Claim 7 is rejected for the same rationale as claim 1 above.

Regarding claim 8, Kuriya in view of Natsuno discloses information-processing apparatus according to claim 1. Although Kuriya does not disclose the transmitting means transmits a request corresponding to the service ID data to a different external apparatus after the service ID data is deleted and before the apparatus ID data is deleted, but Kuriya discloses the sequence of steps for checking in the content in response to a check-in request, in which after receiving the content check-in request in step S4202, the Manager Server performs updating usage conditions in step S4205 as the first step and lastly, deleting the apparatus ID at step S4206. Updating usage conditions requires updating the content management table as described in [0257], [0267], and [0258], during which the updating of the "permitted check-out count" information is performed. Examples of such a content management table are shown in Figs. 18-20, and Fig. 22. According to Kuriya's teachings, it is obvious to delete apparatus ID data after deleting service ID data (updating of the "permitted check-out count" information), which is performed during the step of updating usage conditions. As such, according to the sequence of steps for checking in the content in response to a check-in request illustrated in Fig. 17 as described above, *updating the usage conditions, during which deleting of the service ID is performed (updating of the "permitted check-out count" information), is the first step to be executed in the deleting process and deleting of the apparatus ID data is the last step to be performed in the deleting process.*

Natsuno discloses after the first step of the deleting process and before the last step of the deleting process, the transmitting means transmits a request corresponding to the service ID data to a different external apparatus (*Figs. 29 & 30*).

Therefore, Kuriya and Natsuno disclose the limitation of “the transmitting means transmits a request corresponding to the service ID data to a different external apparatus after the service ID data is deleted and before the apparatus ID data is deleted”.

Regarding claim 15, Kuriya and Halen also disclose the information-processing apparatus according to claim 1, wherein the transmitting means transmits the ticket to the external apparatus in response to a reception of the user ID data, the apparatus ID data and the service ID data by the receiving means (*Kuriya, [0034][0036][0213][0237][0280]-[0284]; Halen, p. 8, lines 15-25, p. 9, lines 11-21 – wherein at least [0213] the authentication process, and therefore any authentication ticket, as disclosed occurs in response to a service request*).

Regarding claim 16, Halen also discloses the information processing apparatus according to claim 1, wherein the deleting means confirms, based on the time data, an authenticity of the ticket, upon a reception of the ticket by the receiving means (*p. 8, lines 15-25, p. 9, lines 11-21*).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuriya et al (US 2001/0056404 A1, hereinafter Kuriya), in view of Natsuno et al (US

2002/0194474 A1, hereinafter Natsuno), Halen et al. (WO 03/028283 – hereinafter Halen), and further in view of Flanagin et al (US 6,128,661, hereinafter Flanagin).

Regarding claim 3, Kuriya discloses an information-processing system configured to delete information stored, in accordance with a request made by a user for canceling a service (*Fig. 17, elements S4106, S4206; Fig. 33, elements S11206, 11502, wherein content, mobile telephone ID, and ID of portable medium are deleted*), the information-processing system comprising:

an information-processing apparatus having receiving means for receiving service ID data designating a specific service to be provided, together with user ID data identifying the user (*Paragraphs [0034][0038] [0237]; reception control means; wherein user ID and “permitted check-out count” information which corresponds to service ID are received*) and apparatus ID data identifying an external apparatus (*Paragraphs [0108][0113][0259], wherein device ID denotes the ID of mobile phone, personal computer or PDA, which corresponds to external apparatus*) ,

storage means (*Paragraph [0034][0044], storage control means*) for storing the user ID data, the apparatus ID data and the service ID data, in association with one another (*Paragraphs [0237] [0259] [0420]*), (*Fig. 17, elements S4106 & S4206; Paragraphs [0319][0320][0324]*),

authentication means for performing an authenticating process in accordance with the user ID data and the apparatus ID data to produce an authentication result (*[0016][0213][0280]-[0284]*)

deleting the apparatus ID data after deleting the service ID data, when request data requesting for a deletion of the apparatus ID data is received, the request data including the user ID data and the apparatus ID data (*Fig. 17, elements S4106 & S4206; Paragraphs [0319][0320][0324]*), and

transmitting means for transmitting, to the external apparatus (*Paragraphs [0039]-[0040]; transmission control means, wherein content is transmitted to information processing apparatus, which corresponds to external apparatus*)

and another external apparatus having data-transmitting means for transmitting the user ID data, the apparatus ID data and the service ID data to the information-processing apparatus (*Paragraphs [0034][0043][0237]*, wherein another mobile telephone or device associated with the same user as shown at least in *Figs. 8 and 15*, which corresponds to the recited another external apparatus transmits a request for purchasing a content to manager server. The request includes user ID, apparatus ID and service ID), ID data storage means for storing the apparatus ID data (*Fig. 14, element S3107; Fig. 17, element S4109, wherein the stored content is associated with user ID, apparatus ID, and service ID*), deletion-request transmitting means for transmitting the data requesting for the deletion (*Fig. 33, element S11106*), and

Kuriya does not disclose transmitting means for transmitting a ticket to the external apparatus, based on the authentication result, and for transmitting deletion-complete information indicating that the deleting means has finished deleting, and

completion-information receiving means for receiving the deletion-complete information, the ticket including time data representing a time of the authenticating process,

However, Natsuno discloses transmitting means for transmitting deletion-complete information indicating that the deleting means has finished deleting the features requested by user (*Paragraphs [0139-0140], wherein a deletion completion notice is shown on the display of the mobile terminal*).

Furthermore, Natsuno also discloses completion-information receiving means for receiving the deletion-complete information (*Paragraphs [0139-0140], wherein a deletion completion notice is shown on the display of the mobile terminal. It is also an indication that the deleting transaction is officially over, so that the resource can be recycled for other processes and updating purposes*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Natsuno into the system of Kuriya because it would provide for the purpose of saving memory area by deleting unnecessary information from storage (*Paragraph [0123]*)

Kuriya and Natsuno do not disclose transmitting a ticket to the external apparatus based on the result of the authentication, the ticket including time data representing a time of the authentication.

However, Halen discloses the transmitting means transmits a ticket to the external apparatus based on the result of the authentication (*p. 9, lines 11-21*), the ticket including time data representing a time of the authentication (*p. 8, lines 15-25*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Halen into the information-processing apparatus disclosed by Kuriya and Natsuno in order to detect replay attacks, i.e. attempt to use an old authenticated result several times, which may be harmful to the system (*Halen*, p. 8, lines 23-25).

Kuriya, Natsuno and Halen do not disclose an ID data deleting means for deleting the apparatus ID stored.

However, Flanagan discloses deleting means for deleting the apparatus ID data stored (*Col. 11, lines 59-67; Col. 12, lines 2-18, wherein the device name which corresponds to the apparatus ID data can be changed by the user, which implies there exists a deleting means for deleting the apparatus ID in order to change its name*)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Flanagan into the system of Kuriya, Natsuno, and Halen because it would provide for the purpose of having a unique apparatus ID that does not correspond to any other partnership on the device that it comes into communication with (*Col. 12, lines 7-18*).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuriya et al (US 2001/0056404 A1, hereinafter Kuriya), Natsuno et al (US 2002/0194474 A1, hereinafter Natsuno), Halen et al. (WO 03/028283 – hereinafter Halen), Flanagan et al (US 6,128,661, hereinafter Flanagan), and further in view of Takeuchi (US 2003/0134615 A1).

Regarding claim 4, Kuriya, Natsuno, Halen and Flanagin disclose the information-processing system according to claim 3, wherein: the information-processing apparatus has authenticating means issuing an authentication session ID that identifies a session with the external apparatus (*Paragraphs [0016][0213]*).

Kuriya, Natsuno, Halen and Flanagin do not disclose the transmitting means transmits the authentication session ID to the external apparatus

the external apparatus transmits the service ID data, together with the authentication session ID received from the information-processing apparatus;

the information-processing apparatus verifies the authentication session ID received, and issues an authentication ticket corresponding to the service ID data received;

the transmitting means transmits the authentication ticket to the external apparatus;

the data-transmitting means of the external apparatus transmits a service-requesting signal to a server which provides the service, together with the authentication ticket received, the service-requesting signal requesting that the server should provide the service.

However, Takeuchi discloses the transmitting means transmits the authentication session ID to the external apparatus (*Paragraphs [0017] [0071], wherein access key which corresponds to session ID is transmitted to external apparatus*).

the external apparatus transmits the service ID data, together with the authentication session ID received from the information-processing apparatus (*Paragraphs [0017] [0071] [0074] wherein external device transmits service requested (corresponds to service ID data) along with access key received to service provision server*);

the information-processing apparatus verifies the authentication session ID received, issues an authentication ticket corresponding to the service ID data received to external apparatus (*Paragraphs [0018] [0075], wherein when receives access key from external apparatus, service provision server verifies that key matches with key from issuance server, if they match, service provision server issues an information for providing service, which corresponds to authentication ticket*);

the transmitting means transmits authentication ticket to the external apparatus (*Paragraphs [0018] [0071], wherein service provision server transmits information for providing the service to external apparatus*);

the data-transmitting means of the external apparatus transmits a service-requesting signal to a server which provides the service, together with the authentication ticket received, the service-requesting signal requesting that the server should provide the service (*Paragraphs [0017][0071][0074][0083], wherein the service user receives service after the service provider performed verification*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Takeuchi into the system of Kuriya

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Natsuno, Halen and Flanagan because it would provide for the purpose of providing a simplified steps of authentication to users, to prevent unauthorized access by performing reliable authentication.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuriya et al (US 2001/0056404 A1, hereinafter Kuriya) and Natsuno et al (US 2002/0194474 A1, hereinafter Natsuno), Halen et al. (WO 03/028283 – hereinafter Halen), Takeuchi (US 2003/0134615 A1), and further in view of Kunigita (US 2003/0078723).

Regarding claim 9, Kuriya, Natsuno, and Halen disclose the information-processing apparatus according to claim 1.

Kuriya, Natsuno, and Halen do not disclose the deleting means compares the ticket with a ticket received by the receiving means, and the deleting means generates authentication-error information when the ticket received by the receiving means is not received within a predetermined term from the time of the authentication.

Takeuchi discloses means for comparing a ticket with a ticket received by the receiving means (*Paragraphs [0018] [0075], wherein when receives access key from external apparatus, service provision server verifies that key matches with key from issuance server, if they match, service provision server issues an information for providing service which corresponds to authentication ticket*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Takeuchi into the system of Kuriya

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and Natsuno because it would provide for the purpose of providing a simplified steps of authentication to users, to prevent unauthorized access by performing reliable authentication.

Kuriya, Natsuno, and Takeuchi do not disclose the deleting means generates authentication-error information when the ticket received by the receiving means is not received within the predetermined term from the time of the authentication.

However, Kunigita discloses generating authentication-error information when the authentication-session ID received by the receiving means is not received within the predetermined term from the time of the authentication (*i.e.* [0059] [0060]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate generating authentication-error information disclosed by Kunigita into the deleting means in the system disclosed by Kuriya, Natsuno, and Takeuchi in order to enhance the user interface of the system by providing a means for user to be notified of the status of the authentication process.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHY ANH VU whose telephone number is (571)270-7317. The examiner can normally be reached on Mon-Thr 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/PHY ANH VU/
Examiner, Art Unit 2437

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437